

**Appl. No.** : 10/646,852  
**Filed** : August 22, 2003

### **AMENDMENTS TO THE CLAIMS**

Please amend claims 1 and 16, cancel claims 14 and 28-32, and add new claim 38 as indicated below.

1. **(Currently Amended)** A method of producing a food product from concentrated protein comprising:

mixing the concentrated protein with water to form a hydrated protein solution;  
treating the protein to enhance its ability to emulsify fat in water; and  
mixing the hydrated protein solution with a concentrated fat to form a first food product,

wherein treating the protein modifies the protein conformation, and wherein enhancement of the treated protein is indicated by at least one of increased emulsion capacity (EC) and increased emulsion stability (ES).

2. **(Original)** The method of Claim 1, further including adding an ingredient to the first food product in order to form a second food product.

3. **(Original)** The method of Claim 2, wherein the additional ingredient is milk.

4. **(Original)** The method of Claim 1, wherein the first food product is a dairy product.

5. **(Original)** The method of Claim 4, wherein the first food product is cream.

6. **(Original)** The method of Claim 5, wherein the cream is combined with milk to produce a second food product.

7. **(Original)** The method of Claim 6, wherein the second food product is used to make cheese.

8. **(Original)** The method of Claim 1, wherein the concentrated protein is a dehydrated protein.

9. **(Original)** The method of Claim 1, wherein the concentrated protein comprises a milk protein.

10. **(Original)** The method of Claim 9, wherein the concentrated protein comprises casein.

11. **(Original)** The method of Claim 1, wherein the concentrated protein is nonfat dry milk.

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12. **(Original)** The method of Claim 1, wherein the concentrated fat comprises milk fat.

13. **(Original)** The method of Claim 12, wherein the concentrated fat comprises about 95% milk fat.

14. **(Canceled)**

15. **(Original)** The method of Claim 1, wherein treating the protein comprises adjusting the ionic composition of the hydrated protein solution.

16. **(Currently Amended)** The method of ~~Claim 1~~Claim 15, wherein the ionic composition of the hydrated protein solution is adjusted by changing the ionic composition of the hydration water prior to mixing with the protein.

17. **(Original)** The method of Claim 16, wherein the ionic composition of the water is adjusted by adding a monovalent salt to the water.

18. **(Original)** The method of Claim 17, wherein the monovalent salt is sodium chloride.

19. **(Original)** The method of Claim 17, wherein the monovalent salt is added to a concentration of about 0.25% to about 2.5%.

20. **(Original)** The method of Claim 15, wherein the ionic composition of the hydrated protein solution is adjusted by adding a monovalent salt to the solution after mixing with water.

21. **(Original)** The method of Claim 20, wherein the monovalent salt is sodium chloride.

22. **(Original)** The method of Claim 20, wherein the monovalent salt is added to a concentration of about 5 parts salt to about 15 parts salt per 100 parts protein.

23. **(Withdrawn)** The method of Claim 1, wherein treating the protein comprises adjusting the pH of the hydrated protein solution.

24. **(Withdrawn)** The method of Claim 23, wherein the pH of the hydrated protein solution is adjusted prior to mixing with the concentrated fat.

25. **(Withdrawn)** The method of Claim 23, wherein the pH is adjusted to between about pH 8.5 and about pH 12.

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26. **(Withdrawn)** The method of Claim 23, wherein treating the protein comprises hydrating the protein with water that has been adjusted to a pH between about pH 8.5 and about pH 12 prior to mixing with the protein.

27. **(Original)** The method of Claim 1, wherein the concentrated fat and hydrated protein are mixed in a high shear mixer or a high-pressure homogenizer.

28-32. **(Canceled)**

33. **(Original)** A method of making cheese comprising:  
mixing nonfat dry milk comprising milk proteins with water to form reconstituted skim milk, wherein the water comprises a monovalent salt prior to mixing;  
combining the reconstituted skim milk with concentrated milk fat;  
homogenizing the combined milk and fat to produce cream;  
diluting the cream with milk to produce standardized milk; and  
using the standardized milk to make cheese.

34. **(Original)** The method of Claim 33, wherein the water comprises from about 0.25 to about 2.5% of the monovalent salt.

35. **(Original)** The method of Claim 34, wherein the monovalent salt is sodium chloride.

36. **(Original)** The method of Claim 33, wherein the concentrated milk fat comprises about 95% anhydrous milk fat.

37. **(Original)** The method of Claim 36, wherein the concentrated milk fat comprises about 5% buttermilk powder.

38. **(New)** A method of producing a food product from concentrated protein comprising:

mixing the concentrated protein with water to form a hydrated protein solution;  
adjusting the ionic composition of the hydrated protein solution to enhance its ability to emulsify fat in water as measured by at least one of increased emulsion capacity (EC) and increased emulsion stability (ES); and  
mixing the hydrated protein solution with a concentrated fat to form a first food product.